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D135-751-011
Job Sheet 192020



Part No: D135-751-011

Job Qty: 1 pcs

Part Name: Skidtube with Standard Wearplates Fits LH or RH



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 3/14/19

Job Tracking No:

Due Date: 4/2/19

Created By: Marie Lajeunesse

Type: SOLD

Description: *order 9622*

Note: DWG DSI 9661 REV A, D3507 REV D IPP Rev:A 44353 New Issue JLM IPP Rev:B 06-12-18 As per Rev B JLM IPP Rev:C 07-12-11 ECN 1036 as per revB DD IPP Rev D 08.11.04 Added DT9431 to sequence 5 EC verf DD IPP Rev E 10.02.22 per PAR 09-043 EC verified: DD IPP Rev:F 10.06.09 remove seq110 DD verf:EC IPP Rev G 10.09.17 added D3507-1-bent EC verified:DD IPP REV:H 13.12.11 ECN13-619/ CHG002 DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		4/2/19	0.00	0.00	Start Up Skidtubes-1		
120	Skidtubes	1 pcs		4/2/19	0.00	0.80	Skidtubes-1		
140	QC	1 pcs		4/2/19	0.00	0.00	QC5		
150	HandFinish	1 pcs		4/2/19	0.00	0.33	HandFinish1		
160	QC	1 pcs		4/2/19	0.00	0.00	QC7-1		
170	Skidtubes	1 pcs		4/2/19	0.00	1.00	Skidtubes-1		
180	QC	1 pcs		4/2/19	0.00	0.00	QC10		
185	HandFinish	1 pcs		4/2/19	0.00	0.10	HandFinish6		
187	QC	1 pcs		4/2/19	0.00	0.00	QC7-1		
190	Skidtubes	1 pcs		4/2/19	0.00	0.77	Skidtubes-1		
200	QC	1 pcs		4/2/19	0.00	0.00	QC5		
210	HandFinish	1 pcs		4/2/19	0.00	0.08	HandFinish2		
215	Outsource	1 pcs		4/2/19			ATE003-VC	5	
220	SprayPaint	1 pcs		4/2/19	0.00	0.25	Spray Paint		
230	QC	1 pcs		4/2/19	0.00	0.00	QC14		
260	HandFinish	1 pcs		4/2/19	0.00	0.74	HandFinish4		
270	QC	1 pcs		4/2/19	0.00	0.00	QC5		
280	Packaging	1 pcs		4/2/19	0.00	0.00	Packaging1-1		
290	QC	1 pcs		4/2/19	0.00	0.00	QC4		
300	Packaging 3-1 - Stock - B4B	1 pcs		4/2/19	0.00	0.00	Packaging 3 - 1 - B4B		
							Packaging 3 - 2 - B4B		
							Packaging 3 - 3 - B4B		
							Packaging 3 - 4 - B4B		
							Packaging 3 - 5 - B4B		
							Packaging 3 - 6 - B4B		
							Packaging 3 - 7 - B4B		
							Packaging 3 - 8 - B4B		
							Packaging 3 - 9 - B4B		

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DAS 59 9-89

DAS 81 9-89

DAS 68 9-89

				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
305 DC	1 pcs	4/2/19	0.00 0.00	DC	
310 QC 21 - FG	1 pcs	4/2/19	0.00 0.00	QC 21 - FG - 21	
				QC 21 - FG - 70	
				QC 21 - FG - 53	

Part Op 120 - 1-Cut Aft end as per dwg D3507 3-Drill Aft & Fwd Cap holes using DT8678 & DT8901 4-Locate DT8870 & Drill Descriptions: Ground wire hole on top of Tube. 6-Locate DT8870 with #30 cleco in Ground wire hole ,then Pilot Drill all X-Bolt holes using #30" drill. ****DO NOT OPEN AFT CAP HOLES**** 7-Open crossbolt holes to 0.3125" (3 per side). Drill pilot holes for wearplates using Dt8868,Use DT8892 FOR REAR WEARPLATE HOLES. 8-Open six rear wearplate holes using DT8892.Open all wearplate holes to 0.297" 9-Open ground wire hole .297" section E-E 10-Open Aft & Fwd Cap holes using .208" drill. 11-Bore out aft end of tube as per Dwg D3507 & Detail "B". 12- Section G-G holes must be laid out manually, open to #30. 13-Deburr holes.

170 - 1-Open X-Bolt holes to .375" (1 Places) & .500"(2Places) as per Dwg D3507. and section G-G to .750" (2 places) 2- Counter Sink X-BOLT holes as per Dwg D3507 3-Deburr and blow out chips from inside of tube. 4-Bond web as per Dwg D3507 & QSI 015 start time : _____ end time: _____ 5-Weld x-bolt spacers as per Dwg D3507 and Detail C-C & D-D and G-G 7-Drill Rivet Holes as per Dwg D3507 Using Dt8871A&B 8-Deburr Rivet holes.

185 - RE-ALODINE ONLY

190 - 1-Rivet D3506-1/-3 as per Dwg D3507.

210 - Touch-up alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

220 - 1- Apply Primer as per QSI 005 4.2.1.3.3 and dwg A/R Primer Batch: S189640 2- Paint two coats of White paint as per QSI 005 4.2 and dwg A/R Paint Batch: S188315

260 - 1- Install Wearplate & Ground Wire inserts as per Dwg D3507. 1-Inspect for Foreign objects 2-Install Fwd & Aft caps as per Dwg D3507 And Detail "A" & "B" 3-Install Wearplates as per Dwg D3507 , Note:Install (1) Bolt and (1) washer on Ground Wire Insert on top of tube Do not Install Scews where indicated on Dwg(Note #6) 4-assemble o'ring to plug as per dwg D3492 and apply o'ring lube 5- Wing Walk as per Dwg D3507 and QSI 005 4.4 Batch:

300 - (Identify as per dwg & Stock Location: _____) Identify and pack for shipping as per PPP D135-751-011 PPP

Rev: _____

305 - Photocopy bluefile & type labels per PPP D135-751-011 CHG002

310 - QC21- Final Inspection - Work Order Release

SIRAELEX
S183445
EXP
04/23/2019

AR
138969

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D3507-1-BENT	Skidtube Assembly EC135	1 pcs (1 ea)	90-Start up Operation	5145108
D3504-1	Crossbolt Spacer	2 pcs (2 ea)	170-Skidtubes	5146029
D3504-3	Crossbolt Spacer	1 pcs (1 ea)	170-Skidtubes	5105604
D3504-5	Crossbolt Spacer	2 pcs (2 ea)	170-Skidtubes	5091959
D3505-1	Web	1 pcs (1 ea)	170-Skidtubes	514105
D3506-1	Doubler	4 pcs (4 ea)	190-Skidtubes	3149088
D3506-3	Doubler	2 pcs (2 ea)	190-Skidtubes	5154442
MS20601-AD4W3	Rivet	12 Ea (12 ea)	190-Skidtubes	5160352
ALS4-1032-225	Rivnut	1 Ea (1 ea)	260-HandFinish	5174308
ALS7-1032-130	Rivnut	38 Ea (38 ea)	260-HandFinish	5159769
AN3C4A	Bolt	31 Ea (31 ea)	260-HandFinish	5143675
AN3C5A	Bolt	2 Ea (2 ea)	260-HandFinish	5176455
AN526C1032R10	Screw	2 Ea (2 ea)	260-HandFinish	5166981
D2965	Cap	1 pcs (1 ea)	260-HandFinish	5045482
D2965-3	Cap	1 pcs (1 ea)	260-HandFinish	5166571
D3492-1	Plug	4 pcs (4 ea)	260-HandFinish	5183125
D3492-3	Plug	4 pcs (4 ea)	260-HandFinish	5163290
D3492-7	Plug	2 pcs (2 ea)	260-HandFinish	5148611
D4918-047	Wearplate Aft	1 pcs (1 ea)	260-HandFinish	5153202
D4918-1	Wearplate Fwd	1 pcs (1 ea)	260-HandFinish	5148279
D4918-3	Wearplate Center Fwd	1 pcs (1 ea)	260-HandFinish	5170023
D4918-5	Wearplate Center Aft	1 pcs (1 ea)	260-HandFinish	5170026
NAS1149C0332R	Washer	33 Ea (33 ea)	260-HandFinish	5158078
NAS1611-007	O-Ring	2 Ea (2 ea)	260-HandFinish	F103697
NAS1611-010	O-Ring	4 Ea (4 ea)	260-HandFinish	5092499
NAS1611-013	O-Ring	4 Ea (4 ea)	260-HandFinish	5170279
AN3C4A	Bolt	31 Ea (31 ea)	280-Packaging	5143675
D3512-041	Wearplate	2 pcs (2 ea)	280-Packaging	5143675
NAS1149C0332R	Washer	33 Ea (33 ea)	280-Packaging	5143675

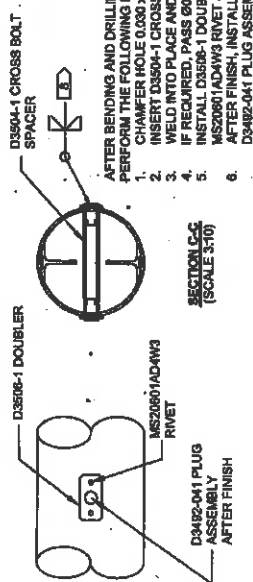
M.U. 010540

Job Allocations

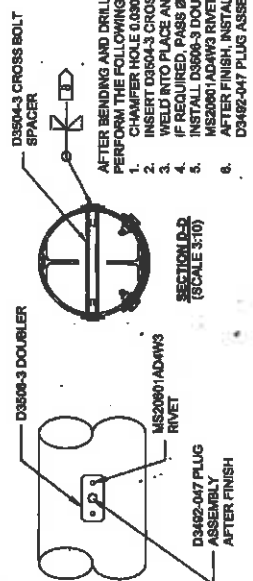
Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	D3507-1-BENT	1	2	0
170-Skidtubes	D3504-1	2	28	0
	D3504-3	1	6	0
	D3504-5	2	14	0
190-Skidtubes	D3505-1	1	14	0
	D3506-1	4	29	0
	D3506-3	2	22	0
	MS20601-AD4W3	12	846	0
260-HandFinish	ALS4-1032-225	1	947	0
	ALS7-1032-130	38	1,990	0
	AN3C4A	31	2,016	0
	AN3C5A	2	1,446	0
	AN526C1032R10	2	57	0
	D2965	1	23	0
	D2965-3	1	5	0
	D3492-1	4	85	0
	D3492-3	4	72	0
	D3492-7	2	22	0
	D4918-047	1	10	0
	D4918-1	1	6	0
	D4918-3	1	2	0
	D4918-5	1	3	0
	NAS1149C0332R	33	5,191	0
	NAS1611-007	2	240	0
	NAS1611-010	4	435	0
	NAS1611-013	4	108	0
280-Packaging	AN3C4A	8	2,016	0
	D3512-041	2	1	0
	NAS1149C0332R	8	5,191	0

Part Specifications	
Specifications could not be found.	

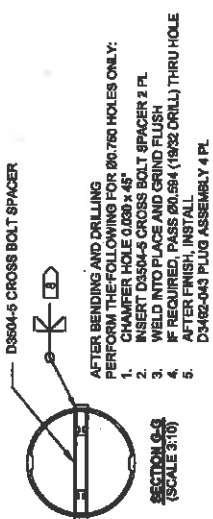
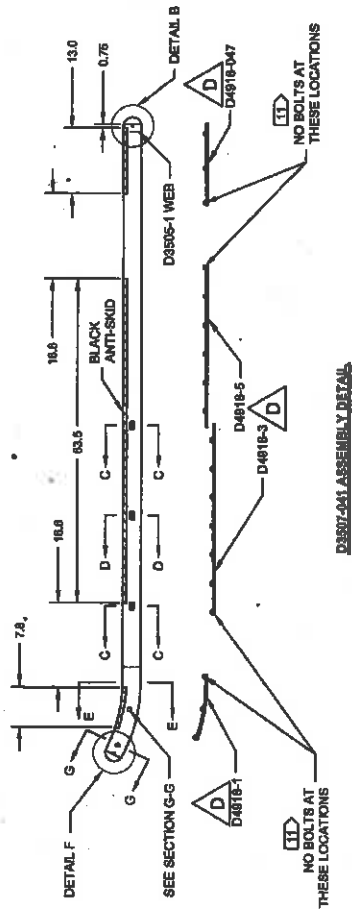
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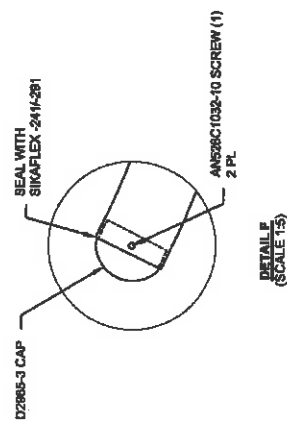
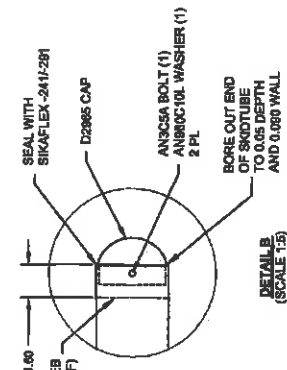
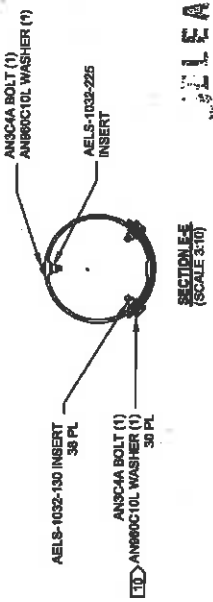
- AFTER BENDING AND DRILLING ASSEMBLY PERFORM THE FOLLOWING FOR 60.500 HOLES ONLY:
1. CHAMFER HOLE 0.030 x 45°
 2. INSERT D3504-1 CROSS BOLT SPACER 2 PL
 3. WELD INTO PLACE AND GRIND FLUSH
 4. IF REQUIRED, PASS 60.404 (1" DRILL) THRU HOLE
 5. INSTALL D3505-1 DOUBLER 4 PL USING MS20601AD4W3 RIVET 8 PL
 6. AFTER FINISH, INSTALL D3482-041 PLUG ASSEMBLY 4 PL



- AFTER BENDING AND DRILLING ASSEMBLY PERFORM THE FOLLOWING FOR 60.376 HOLES ONLY:
1. CHAMFER HOLE 0.030 x 45°
 2. INSERT D3504-3 CROSS BOLT SPACER 1 PL
 3. WELD INTO PLACE AND GRIND FLUSH
 4. IF REQUIRED, PASS 60.277 (1" DRILL) THRU HOLE
 5. INSTALL D3505-1 DOUBLER 2 PL USING MS20601AD4W3 RIVET 4 PL
 6. AFTER FINISH, INSTALL D3482-047 PLUG ASSEMBLY 2 PL



- AFTER BENDING AND DRILLING PERFORM THE FOLLOWING FOR 60.750 HOLES ONLY:
1. CHAMFER HOLE 0.030 x 45°
 2. INSERT D3504-5 CROSS BOLT SPACER 2 PL
 3. WELD INTO PLACE AND GRIND FLUSH
 4. IF REQUIRED, PASS 60.594 (1/2" DRILL) THRU HOLE
 5. AFTER FINISH, INSTALL D3482-043 PLUG ASSEMBLY 4 PL



RELEASED
2013-12-10

DESIGN	DW	DART AEROSPACE USA, INC
DRAWN	DW	KENT, WA
CHECKED	CP	DRAWING NO. D3507
MFG. APPR.	AP	REV. D SHEET 2 OF 2
APPROVED	AP	TITLE EC 135 SKIDTUBE
DE APPR.	AP	SCALE NTS
DATE	13.08.30	

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Entered: _____ Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐



Job: _____ Part No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐				DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Eng. (Non-AW) ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Large Fab ☐ Finishing ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐				MRB (QSI042)																																	
Date: _____		Sequence #: _____		QTY Affected: _____		Disposition																																					
Description Work Order Deviation						Completed By																																					
_____						Lead hand / Supervisor																																					
_____						QC / QA Coordinator																																					
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐						FAULT CATEGORY <table border="1"> <tr> <td>Pressure/Forced</td> <td>Contamination</td> <td>Power Loss/Surge</td> <td>Positioned Wrong</td> </tr> <tr> <td>Bending</td> <td>Misaligned/off center</td> <td>Folio/Program</td> <td>Outside Tolerance</td> </tr> <tr> <td>Crushing</td> <td>BOM/Route</td> <td>Grain Direction</td> <td>Drawing</td> </tr> <tr> <td>Cracks</td> <td>Broken/Damage/Defect</td> <td>Weld</td> <td>Finish</td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave/Twist</td> <td>Incomplete/Unclear Instructions</td> <td>Wrong Stock Pulled</td> <td>Part Lost/Missing</td> </tr> <tr> <td>Marks/Chatter</td> <td>Drill Holes</td> <td>Out of Sequence</td> <td>Misread</td> </tr> <tr> <td>Mislabeled</td> <td>Fit/Function</td> <td>Off-set/Set-up</td> <td></td> </tr> </table>										Pressure/Forced	Contamination	Power Loss/Surge	Positioned Wrong	Bending	Misaligned/off center	Folio/Program	Outside Tolerance	Crushing	BOM/Route	Grain Direction	Drawing	Cracks	Broken/Damage/Defect	Weld	Finish	Crimp/Kink/Ripple/Wave/Twist	Incomplete/Unclear Instructions	Wrong Stock Pulled	Part Lost/Missing	Marks/Chatter	Drill Holes	Out of Sequence	Misread	Mislabeled	Fit/Function	Off-set/Set-up	
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Other/Details: _____																																											

5.0 PARTS LIST

Item	Qty -011	Qty -041	Qty -043	Qty -101	Part Number	Description
	X				D135-751-011	SKIDTUBE INSTALLATION
	1	X			D135-751-041	REPLACEMENT SKIDTUBE
			X		D135-751-043	WEARPLATE KIT
				X	D135-751-101	SKIDTUBE EXTENSION KIT
1		1			D3507-041	SKIDTUBE ASSEMBLY
2	4				**BRS8-96/48SZ-M8-W2	CLAMP
3	8				**LN9038-08032	SCREW
4		1			*D2965	CAP
5		1			*D2965-3	CAP
6		2			***AELS-1032-130	INSERT
7		2			***AELS-1032-225	INSERT
8		2			*AN3C5A	BOLT
9		2			*AN960C10L	WASHER
10		2			*AN526C1032-10	SCREW
20A		1	1		*D3508-1	WEARPLATE
20B		1	1		*D3558-1	GASKET
21A		1	1		*D3508-3	WEARPLATE
21B		1	1		*D3558-3	GASKET
22A		1	1		*D3508-5	WEARPLATE
22B		1	1		*D3558-5	GASKET
23A		1	1		*D3508-7	WEARPLATE
23B		1	1		*D3558-7	GASKET
24		38			*AELS-1032-130	INSERT
25	8	30	38		*AN3C4A	BOLT
26	8	30	38		*AN960C10L	WASHER
27	2		2		D3512-1	WEARPLATE
30		1			*AELS-1032-225	INSERT
31		1			*AN3C4A	BOLT
32		1			*AN960C10L	WASHER
40		4			*D3492-041	PLUG ASSEMBLY
41		4			***NAS1611-010	O-RING
42		2			*D3492-047	PLUG ASSEMBLY
43		2			***NAS1611-007	O-RING
44		4			*D3506-1	DOUBLER
45		8			*MS20601AD4W3	RIVET
46		2			*D3506-3	DOUBLER
47		4			*MS20601AD4W3	RIVET
48		4			*D3492-043	PLUG ASSEMBLY
49		4			***NAS1611-013	O-RING
50				1	D3510-041	INSERT ASSEMBLY
51				2	***AELS-1032-130	INSERT
52				6	***AELS-1032-225	INSERT
53				2	***ALS4-428-165	INSERT
54				2	AN4C7A	BOLT
55				2	AN960C416L	WASHER
56				2	AN3C4A	BOLT
57				8	AN3C7A	BOLT
58				10	AN960C10L	WASHER

* PART IS INCLUDED WITH D3507-041 SKIDTUBE ASSEMBLY

** TO BE SUPPLIED BY CUSTOMER, LISTED AS REFERENCE ONLY

*** DENOTES PART IS INCLUDED WITH ASSEMBLY ABOVE

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Revision: C

Date: 07.09.20

Change Record

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Part Number: D135-751-011

Description: SKIDTUBE

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